KANSAS DEPARTMENT OF AGRICULTURE

Plant Disease in Kansas

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Special points of interest:

- *Virus diseases of greenhouse plants*
- *New find of pine wilt in Hays*
- *Missouri enacts a temporary exterior quarantine for 1000 cankers of walnut.*

Greenhouse diseases pick up

It seems that several viral diseases are of increased interest in greenhouse production of plants this year. The most important has been the Tospovirus group that can be transmitted by thrips and vegetative propagation. Impatiens necrotic spot virus INSV had been reported in several large greenhouses in coleus. Symptoms have included necrotic lesions and ring spots. It seems that most of the reports are of infected cuttings. Plants reported recently with INSV or Tomato spotted wilt virus (tospo) TSWV include Ranunculus, Stephanotis, Aeschynanthus radican, and Impatiens.

Other viral diseases have been a Poty virus (undetermined) on Ranuculus and Alstromeria mosaic virus (poty) AIMV on Alstromeria, Peruvian Lily, Tango cultivar. The two Poty viruses were new reports in Kansas. The one on Ranuculus came in on imported plants from South Africa. These plants also had the TSWV report. The Peruvian lily had been propagated by tissue culture but was not disease free. Tango cultivar was a new release. Because of the diagnosis, it was reecalled for further viral clean up. The cultivar also had Lily symptomless virus and the combination was lethal to many of the plants.

Below is an image of INSV necrotic lesions and ring spots on coleus.

The next image is INSV ring spots on Aeschynanthus radican, lipstick.

Images by C. Copeland and T. Sanders, KDA.

The image below is AIMV mosaic symptom of the Peruvian lily.

The final image is the Poty virus on the Ranuculus from S. Africa. Note unusual growth.

Wheat disease update

Warmer temperatures and rainfall have been ideal for wheat growth in Kansas. Wheat survey was conducted recently in the eastern two thirds of the state. Disease pressure overall is low. The most common disease in the fields currently is speckled leaf blotch, *Septoria tritici*. Leaf spotting of lower leaves is currently what can be observed. Other reports include powdery mildew and soil borne mosaic. Leaf or stripe rust was not observed in production fields. Barley yellow dwarf virus was seen in a few fields in NC and C Kansas last week and symptoms are early in development with purple and yellow flagging of plants.

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INVASIVE SPECIES

Plant Protection and Weed Control Program

Plant Protection and Weed Control staff work to ensure the health of the state's native and cultivated plants by excluding or controlling destructive pests, diseases and weeds. Staff examine and analyze pest conditions in crop fields, rangelands, greenhouses and nurseries. Action taken to control potential infestations of new pests, whether they are insects, plants diseases or weeds, is beneficial to the economy and the environment.

Our Mission is to:

- Exclude or control harmful insects, plant diseases, and weeds;
- Ensure Kansas plants and plant products entering commerce are free from quarantine pests;
- Provide customers with inspection and certification services.

The Plant Disease Survey in Kansas has been conducted since 1976. The survey addresses disease situations in field crops, native ecosystems, and horticultural trade. The Kansas Department of Agriculture works cooperatively with Kansas State University and Extension programs, United States Department of Agriculture, and various commodity groups.

Pine wilt and 1000 cankers disease of walnut

A new find of pine wilt came from Hays this past week along with a number of reports out of Pratt, Stafford, and Mitchell counties. The Hays report was the first one for two years and the tree was a Scotch pine in the northwest part of town. This is worrisome since well over several hundred Scotch pine are in the area.

In Stafford, Pratt, and Mitchell counties both Scotch and Austrian pines have been reported and removed to stop the emergence of pine sawyers. Emergence begins in about a month from now.

Recently Bob Bauernfeind with KSU Entomology reported finding well over 100 sawyers in a medium sized tree. It is so important to reduce these potential vectors by chipping, burning, or burying the wood and Bob's work puts reemphasis into winning this numbers game.

WALNUT

Missouri Department of Agriculture recently enacted an Emergency Rule/Exterior Quarantine pertaining to 1000 cankers of walnut in an effort to stop the introduction into Missouri.

A nice guide for identification of the disease can be found at http://mda.mo.gov/plants/pdf/tcidentification.pdf .